

# ABSTRACT

1 Method and apparatus for evaluating one or more materials  
2 in accordance with size of particles. The method includes  
3 evaluating a spectrum of light reflected from a first  
4 group of particles; evaluating a spectrum of light  
5 reflected from a second group of particle; comparing  
6 results of said evaluating of said first group with  
7 results of said evaluating of said second group; and  
8 providing an indication of a state of said material when  
9 said comparing produces a predetermined comparison  
10 result. Distance between a first light conductor for  
11 conducting light to the particles and a second light  
12 conductor for conducting light from said particles for  
13 said evaluations may be varied. Monitoring of a process  
14 for changes in particle size as a function of time or to  
15 determine various physical and/or chemical  
16 characteristics of the particles or a mixture containing  
17 same, including homogeneity, may be achieved.